

What is claimed is:

1. A method for the automatic collection of surveillance information by an unmanned air vehicle, the method comprising the steps of:
 - receiving an automatic collection requirements message;
 - determining a route for gathering requested information about a target in accordance with a collection policy; and
 - controlling operation of an air vehicle to follow the route and gather the requested information.
2. The method of claim 1, wherein each automatic collection requirements message includes priority and precedence information.
3. The method of claim 2, wherein the step of a determining route for gathering requested information comprises the steps of:
 - determining a collection plan and a flight plan in accordance with the priority and precedence information.
4. The method of claim 3, wherein the collection plan is responsive to imaging constraints including one or more of:
 - temporal constraints, look angles, National Imagery Interpretability Rating Scale rating, priority, bandwidth, and storage capacity.
5. The method of claim 1, wherein the step of a determining route for gathering requested information comprises the steps of:
 - determining if the target is within range; and
 - planning a route to the target if the target is within range.
6. The method of claim 1, wherein the step of a determining route for gathering requested information comprises the steps of:
 - determining if a receiver is within range; and
 - if a receiver is not within range, planning a route to an area where a receiver is within range.
7. The method of claim 1, further comprising the step of:
 - dynamically inserting new sensor collection requests into an existing collection plan.
8. An automatic collection management system for an unmanned air vehicle comprising:
 - a receiver for receiving an automatic collection requirements message;

a processor for determining a route for gathering requested information about a target in accordance with a collection policy; and

a vehicle control for controlling operation of an air vehicle to follow the route and gather the requested information.

9. The system of claim 8, wherein each automatic collection requirements message includes priority and precedence information.

10. The system of claim 8, wherein the processor determines a collection plan and a flight plan.

11. The system of claim 10, wherein the collection plan is responsive to imaging constraints including one or more of:

temporal constraints, look angles, National Imagery Interpretability Rating Scale rating, priority, bandwidth, and storage capacity.

12. The system of claim 8, wherein the processor determines if the target is within range and plans a route to the target if the target is within range.

13. The system of claim 8, wherein the processor determines if a receiver is within range; and if a receiver is not within range, plans a route to an area where a receiver is within range.

14. The system of claim 8, wherein the processor dynamically inserts new sensor collection requests into an existing collection plan.

15. An automatic collection management system for an unmanned air vehicle comprising:

means for receiving an automatic collection requirements message;

means for determining a route for gathering requested information about a target in accordance with a collection policy; and

means for controlling operation of an air vehicle to follow the route and gather the requested information.

16. The system of claim 15, wherein each automatic collection requirements message includes priority and precedence information.

17. The system of claim 15, wherein the means for determining a route for gathering requested information determines a collection plan and a flight plan.

18. The system of claim 17, wherein the collection plan is responsive to imaging constraints including one or more of:

temporal constraints, look angles, National Imagery Interpretability Rating Scale rating, priority, bandwidth, and storage capacity.

19. The system of claim 15, wherein the means for determining a route for gathering requested information determines if the target is within range and plans a route to the target if the target is within range.

20. The system of claim 15, wherein the means for determining a route for gathering requested information determines if a receiver is within range; and if a receiver is not within range, plans a route to an area where a receiver is within range.